Contents to volume 309

Hypothesis

How is rat liver *S*-adenosylmethionine synthetase regulated? (FEBS 11453) *M.A. Pajares, F. Corrales, C. Durán, J.M. Mato, L. Alvarez* 1

Research Letters

Distinct and specific GAP activities in rat pancreas act on the yeast GTP-binding proteins Ypt1 and Sec4 (FEBS 11455) *B.P. Jena, P. Brennwald, M.D. Garrett, P. Novick, J.D. Jamieson* 5

Thrombin-induced human platelet aggregation is inhibited by protein-tyrosine kinase inhibitors, ST638 and genistein (FEBS 11458) *M. Asahi, S. Yanagi, S. Ohta, T. Inazu, K. Sakai, F. Takeuchi, T. Taniguchi, H. Yamamura* 10

The gene structure of tetranectin, a plasminogen binding protein (FEBS 11459) *L. Berglund, T.E. Petersen* 15

Membrane inserted APP fragments containing the βA4 sequence of Alzheimer's disease do not aggregate (FEBS 11478) *T. Dyrks, E. Dyrks, C. Masters, K. Beyreuther* 20

Parental imprinting of the human H19 gene (FEBS 11460) *J. Rachmilewitz, R. Goshen, I. Ariel, T. Schneider, N. de Groot, A. Hochberg* 25

The zinc finger motif: Conservation of chemical shifts and correlation with structure (FEBS 11446) *M.S. Lee, R.J. Mortishire-Smith, P.E. Wright* 29

The jasmonate precursor, 12-oxo-phytodienoic acid, induces phytoalexin synthesis in *Petroselinum crispum* cell cultures (FEBS 11462) *H. Dittrich, T.M. Kutchan, M.H. Zenk* 33

Induction of the peroxisome proliferator activated receptor by fenofibrate in rat liver (FEBS 11471) *T. Gebel, M. Arand, F. Oesch* 37

Synthetic peptides of the effector-binding domain of rab enhance secretion from digitonin-permeabilized chromaffin cells (FEBS 11477) *J. Senyshyn, W.E. Balch, R.W. Holz* 41

Co-transcription of the gastrin and cholecystokinin genes with selective translation of gastrin mRNA in a human gastric carcinoma cell line (FEBS 11454) *W.W. van Solinge, J.F. Rehfeld* 47

Steroid 21-hydroxylase is a major autoantigen involved in adult onset autoimmune Addison's disease (FEBS 11457) *J. Bednarek, J. Furmaniak, N. Wedlock, Y. Kiso, A. Baumann-Antczak, S. Fowler, H. Krishnan, J.A. Craft, B.R. Smith* 51

Interaction of plasma gelsolin with tropomyosin (FEBS 11464) *E.K. Koepf, L.D. Burtnick* 56

Crystal structure of human recombinant interleukin-4 at 2.25 Å resolution (FEBS 11465) *A. Wlodaver, A. Pavlovsky, A. Gustchina* 59

Lys-373 of actin is involved in binding to caldesmon (FEBS 11466) *J. Kolakowski, R. Makuch, R. Dąbrowska* 65

The amino acid sequence of a 20 kDa bifunctional subtilisin/α-amylase inhibitor from brain of rice (*Oryza sativa* L.) seeds (FEBS 11467) *K.-I. Ohtsubo, M. Richardson* 68

Detection of the photoactive protochlorophyllide–protein complex in the light during the greening of barley (FEBS 11475) *F. Franck, K. Strzalka* 73

Properties of the tungsten-substituted molybdenum formylmethanofuran dehydrogenase from *Methanobacterium wolfei* (FEBS 11479) *R.A. Schmitz, S.P.J. Albracht, R.K. Thauer* 78

Inhibitory effect of human chorionic gonadotropin (hCG) on HIV-1 transmission from lymphocytes to trophoblasts (FEBS 11494) *A.S. Bourinbaiar, R. Nagorny* 82

The His-probe method: effects of histidine residues introduced into the complementarity-determining regions of antibodies on antigen–antibody interactions at different pH values (FEBS 11483) *W. Ito, N. Sakato, H. Fujio, K. Yutani, Y. Arata, Y. Kurosawa* 85

Reduced puromycin sensitivity of translocated polysomes after the addition of elongation factor 2 and non-hydrolysable GTP analogues (FEBS 11484) *L. Nilsson, O. Nygård* 89

Copper(II)-substituted horse liver alcohol dehydrogenase: structure of the minor species (FEBS 11489) *G. Formicka, M. Zeppezauer, F. Fey, J. Hüttermann* 92

Vector methylation inhibits transcription from the SV40 early promoter (FEBS 11473) *M. Bryans, S. Kass, C. Seivwright, R.L.P. Adams* 97

Ca^{2+}/calmodulin-activated protein phosphatase (PP2B) of *Saccharomyces cerevisiae*: PP2B activity is not essential for growth (FEBS 11463) *T. Nakamura, H. Tsutsumi, H. Mukai, T. Kuno, T. Miyakawa* 103

Lipid interaction of Tetanus neurotoxin: A calorimetric and fluorescence spectroscopy study (FEBS 11461) *E. Calappi, M. Masserini, G. Schiavo, C. Montecucco, G. Tettamanti* 107

Relocalization of αB-crystallin by heat shock in ovarian carcinoma cells (FEBS 11481) *C.E.M. Voorter, L. Wintjes, H. Bloemendal, W.W. de Jong* 111

The complete primary structure of abrin-a B chain (FEBS 11482) *Y.-L. Chen, L.-P. Chow, A. Tsugita, J.-Y. Lin* 115

Zymosan induces selective release of arachidonic acid from rabbit alveolar macrophages via stimulation of a β-glucan receptor (FEBS 11486) *T. Daum, M.S. Rohrbach* 119

Structure of the small ribosomal subunit RNA of the pulmonate snail, *Limicolaria kambeul*, and phylogenetic analysis of the Metazoa (FEBS 11490) *B. Winnepenninckx, T. Backeljau, Y. van de Peer, R. De Wachter* 123

The formate complex of the cytochrome *bo* quinol oxidase of *Escherichia coli* exhibits a '$g = 12$' EPR feature analogous to that of 'slow' cytochrome oxidase (FEBS 11485) *M.W. Calhoun, R.B. Gennis, J.C. Salerno* 127

TATA box-independent transcription of the human tissue plasminogen activator gene initiates within a sequence conserved in related genes (FEBS 11456) *B.R. Henderson, M.J. Sleigh* 130

A protective role for nitric oxide in the oxidative modification of low density lipoproteins by mouse macrophages (FEBS 11487) *M.T. Yates, L.E. Lambert, J.P. Whitten, I. McDonald, M. Mano, G. Ku, S.J.T. Mao* 135

X-ray crystal structure of the serine proteinase inhibitor eglin c at 1.95 Å resolution (FEBS 11496) *K. Hipler, J.P. Priestle, J. Rahuel, M.G. Grütter* 139

Stimulation of SV40 DNA replication by the human c-*myc* enhancer (FEBS 11468) *M. Kumano, T. Nakagawa, Y. Imamura, I. Galli, H. Ariga, S.M.M. Iguchi-Ariga* 146

Insulin receptor and glucose transporter mRNA expression in skeletal muscle of genetically obese Zucker rats (FEBS 11491) *R.M. Knott, J.E. Hesketh* 153

Identification of heme macrocycle type by near-infrared magnetic circular dichroism spectroscopy at cryogenic temperatures (FEBS 11493) *Q. Peng, R. Timkovich, P.C. Loewen, J. Peterson* 157

The angiotensin AT_2 receptor modulates T-type calcium current in non-differentiated NG108-15 cells (FEBS 11495) *B. Buisson, S.P. Bottari, M. de Gasparo, N. Gallo-Payet, M.D. Payet* 161

Characterization of a 41 kDa photoinhibition adduct in isolated photosystem II reaction centres (FEBS 11497) *R. Barbato, G. Friso, F. Rigoni, A. Frizzo, G.M. Giacometti* 165

Occupancy of a C_2-C_2 type 'Zinc-finger' protein domain by copper: Direct observation by electrospray ionization mass spectrometry (FEBS 11492) *T.W. Hutchens, M.H. Allen, C.M. Li, T.-T. Yip* 170

The molecular mechanism of the control of excitation energy dissipation in chloroplast membranes: Inhibition of ΔpH-dependent quenching of chlorophyll fluorescence by dicyclohexylcarbodiimide (FEBS 11498) *A.V. Ruban, R.G. Walters, P. Horton* 175

Antibody to the inositol trisphosphate receptor blocks thimerosal-enhanced Ca^{2+}-induced Ca^{2+} release and Ca^{2+} oscillations in hamster eggs (FEBS 11499) *S.-i. Miyazaki, H. Shirakawa, K. Nakada, Y. Honda, M. Yuzaki, S. Nakade, K. Mikoshiba* 180

The role of the C-terminal region of rat brain natriuretic peptide in receptor selectivity (FEBS 11500) *Y. Shimekake, T. Kawabata, M. Nakamura, K. Nagata* 185

Reactive oxygen species are involved in the activation of cellular phospholipase A_2 (FEBS 11504) *R. Goldman, E. Ferber, U. Zort* 190

DNA base modifications in chromatin of human cancerous tissues (FEBS 11503) *R. Olinski, T. Zastawny, J. Budzbon, J. Skokowski, W. Zegarski, M. Dizdaroglu* 193

The microtubule binding repeats of tau protein assemble into filaments like those found in Alzheimer's disease (FEBS 11505) *R.A. Crowther, O.F. Olesen, R. Jakes, M. Goedert* 199

Molecular cloning of the α-subunit of rat endopeptidase-24.18 (endopeptidase-2) and co-localization with endopeptidase-24.11 in rat kidney by in situ hybridization (FEBS 11506) *D. Corbeil, F. Gaudoux, S. Wainwright, J. Ingram, A.J. Kenny, G. Boileau, P. Crine* 203

Vanadate potentiates the glycogenic action of insulin-like growth factors on isolated diaphragm (FEBS 11508) *G. Vandorpe, M. Bollen, E. Van Herck, R. Bouillon, W. Stalmans* 209

Fourier transform infrared (FTIR) spectroscopic investigation of the nicotinic acetylcholine receptor (nAChR): Investigation of agonist binding and receptor conformational changes by flash-induced release of 'caged' carbamoylcholine (FEBS 11507) *U. Görne-Tschelnokow, F. Hucho, D. Naumann, A. Barth, W. Mäntele* 213

Molecular cloning of a cDNA that encodes a serine protease with chymotryptic and collagenolytic activities in the hepatopancreas of the shrimp *Penaeus vanameii* (Crustacea, Decapoda) (FEBS 11449) *D. Sellos, A. Van Wormhoudt* 219

Thermal injury and ozone stress affect soybean lipoxygenases expression (FEBS 11480) *M. Maccarrone, G.A. Veldink, J.F.G. Vliegenthart* 225

Peptidyl-prolyl *cis-trans* isomerase from *Bacillus subtilis*: A prokaryotic enzyme that is highly sensitive to cyclosporin A (FEBS 11501) *M. Herrler, H. Bang, K. Brune, G. Fischer, M.A. Marahiel* 231

Influence of amphipathic peptides on the HIV-1 production in persistently infected T lymphoma cells (FEBS 11470) *M. Wachinger, T. Saermark, V. Erfle* 235

Signal transduction in neutrophil activation: Phosphatidylinositol 3-kinase is stimulated without tyrosine phosphorylation (FEBS 11502) *C.J. Vlahos, W.F. Matter* 242

The effect of dilauroyl-L-3-phosphatidylcholine on the interaction between cytochrome *P*-450 1A1 and benzo[*a*]pyrene (FEBS 11509) *Y. Omata, F.K. Friedman* 249

Chimeric study of sodium channels from rat skeletal and cardiac muscle (FEBS 11510) *L.-Q. Chen, M. Chahine, R.G. Kallen, R.L. Barchi, R. Horn* 253

Heat and cold denaturation of β-lactoglobulin B (FEBS 11511) *A.I. Azuaga, M.L. Galisteo, O.L. Mayorga, M. Cortijo, P.L. Mateo* 258

Effect of pancreatic type phospholipase A_2 on isolated porcine cerebral arteries via its specific binding sites (FEBS 11513) *M. Nakajima, K. Hanasaki, M. Ueda, H. Arita* 261

Differences in the thermostabilities of barley (1→3,1→4)-β-glucanases are only partly determined by *N*-glycosylation (FEBS 11536) *D.N.P. Doan, G.B. Fincher* 265

A marine algal Na^+-activated ATPase possesses an immunologically identical epitope to Na^+,K^+-ATPase (FEBS 11512) *M. Wada, O. Urayama, S. Satoh, Y. Hara, Y. Ikawa, T. Fujii* 272

$p56^{lyn}$ catalyzes a reversible autophosphorylation reaction and a nucleoside diphosphate kinase reaction (FEBS 11514) *C.M.E. Litwin, M. Gendreau, J.H. Wang* 275

A membrane-associated cysteine protease inhibitor from murine hepatoma (FEBS 11515) *K. Moin, L.T. Emmert, B.F. Sloane* 279

Artifactual detection of ADP-dependent sucrose synthase in crude plant extracts (FEBS 11516) *P. Perata, J. Pozueta-Romero, J. Yamaguchi, T. Akazawa* 283

The primitive metazoan *Hydra* expresses antistasin, a serine protease inhibitor of vertebrate blood coagulation: cDNA cloning, cellular localisation and developmental regulation (FEBS 11517) *T.W. Holstein, C. Mala, E. Kurz, K. Bauer, M. Greber, C.N. David* 288

The differential role of Cys-421 and Cys-429 of the Glut1 glucose transporter in transport inhibition by *p*-chloromercuribenzenesulfonic acid (pCMBS) or cytochalasin B (CB) (FEBS 11518) *M. Wellner, I. Monden, K. Keller* 293

Over-expression of the small heat-shock protein, hsp25, inhibits growth of Ehrlich ascites tumor cells (FEBS 11519) *U. Knauf, H. Bielka, M. Gaestel* 297

Endothelin 1 hydrolysis by rat kidney membranes (FEBS 11520) *T. Yamaguchi, M. Fukase, M. Arao, T. Sugimoto, K. Chihara* 303

The genetic defect of the original Norwegian lecithin:cholesterol acyltransferase deficiency families (FEBS 11521) *G. Skretting, J.P. Blomhoff, J. Solheim, H. Prydz* 307

Cloning and sequence analysis of a cDNA clone from *Arabidopsis thaliana* homologous to a proteasome α subunit from *Drosophila* (FEBS 11522) *P. Genschik, G. Philipps, C. Gigot, J. Fleck* 311

The disulfide bridge pattern of snake venom disintegrins, flavoridin and echistatin (FEBS 11523) *J.J. Calvete, Y. Wang, K. Mann, W. Schäfer, S. Niewiarowski, G.J. Stewart* 316

A calcineurin-like phosphatase is required for catch contraction (FEBS 11524) *L. Castellani, C. Cohen* 321

Influenza virus A infection induces interleukin-8 gene expression in human airway epithelial cells (FEBS 11525) *A.M.K. Choi, D.B. Jacoby* 327

Cell-free translation in reversed micelles (FEBS 11526) *S.N. Nametkin, M.I. Kolosov, S.Yu. Ovodov, A.N. Alexandrov, A.V. Levashov, V.Yu. Alakhov, A.V. Kabanov* 330

H^+-translocating ATPase and Na^+/H^+ antiport activities in the plasma membrane of the marine alga *Platymonas viridis* (FEBS 11527) *L.G. Popova, Yu.V. Balnokin* 333

Carbohydrates in mammalian tryptophanyl-tRNA synthetase (FEBS 11528) *G.K. Kovaleva, A.O. Zheltova, T.V. Nikitushkina, T.A. Egorov, A.Ch. Musoljamov, L.L. Kisselev* 337

Isolation from *Spirulina* membranes of two photosystem I-type complexes, one of which contains chlorophyll responsible for the 77 K fluorescence band at 760 nm (FEBS 11529) *V.V. Shubin, I.N. Bezsmertnaya, N.V. Karapetyan* 340

Cyclic AMP-dependent phosphorylation and regulation of the cardiac dihydropyridine-sensitive Ca channel (FEBS 11531) *A. Yoshida, M. Takahashi, S. Nishimura, H. Takeshima, S. Kokubun* 343

Direct RNA polymerase chain reaction for TMV detection in crude cell extracts (FEBS 11530) *Yu.F. Drygin, S.G. Korotaeva, Yu.L. Dorokhov* 350

Leukotriene A_4 hydrolase, a bifunctional enzyme: Distinction of leukotriene A_4 hydrolase and aminopeptidase activities by site-directed mutagenesis at Glu-297 (FEBS 11533) *M. Minami, H. Bito, N. Ohishi, H. Tsuge, M. Miyano, M. Mori, H. Wada, H. Mutoh, S. Shimada, T. Izumi, K. Abe, T. Shimizu* 353

Molecular cloning and functional expression of the second mouse *nm*23/NDP kinase gene, *nm*23-M2 (FEBS 11534) *T. Urano, K. Takamiya, K. Furukawa, H. Shiku* 358

Studies on antisense inhibition of translation in vitro: Anomalies and re-evaluation (FEBS 11548) *R.D. Ricker, A. Kaji* 363

Carboxyl-terminal processing may be essential for production of active NiFe hydrogenase in *Azotobacter vinelandii* (FEBS 11563) *D.J. Gollin, L.E. Mortenson, R.L. Robson* 371

Protein conformational changes and myelin solubilization by anion-detergent solutions (FEBS 11538) *J. Monreal, P. Carmona, P. Regueiro, R.S. Díaz* 376

A selective inhibitor of cyclic AMP-dependent protein kinase, *N*-[2-bromocinnamyl(amino)ethyl]-5-isoquinolinesulfonamide (H-89), inhibits phosphatidylcholine biosynthesis in HeLa cells (FEBS 11539) *C.C. Geilen, M. Wieprecht, T. Wieder, W. Reutter* 381

Synthesis of a large peptide mimicking the DNA binding properties of the sex determining protein, SRY (FEBS 11540) *F. Poulat, G. Guichard, C. Gozé, F. Heitz, B. Calas, P. Berta* 385

Solid phase synthesis of the proteinase of bovine leukemia virus: Comparison of its specificity to that of HIV-2 proteinase (FEBS 11543) *I. Bláha, J. Tözsér, Y. Kim, T.D. Copeland, S. Oroszlan* 389

Mono ADP-ribosylation of transducin catalyzed by rod outer segment extract (FEBS 11542) *S. Ehret-Hilberer, G. Nullans, D. Aunis, N. Virmaux* 394

Synthesis of active metabolite(s) from 1α-hydroxyvitamin D_3 by human monocytic leukemia cells (FEBS 11544) *J. Okabe-Kado, Y. Honma, T. Kasukabe, M. Hozumi* 399

Endothelial nitric oxide synthase is myristylated (FEBS 11546) *J.S. Pollock, V. Klinghofer, U. Förstermann, F. Murad* 402

Inhibition of rat tissue kallikrein gene family members by rat kallikrein-binding protein and α1-proteinase inhibitor (FEBS 11550) *C. Serveau, T. Moreau, G.X. Zhou, J. Chao, F. Gauthier* 405

Expression of protein kinase C subspecies in rat retina (FEBS 11552) *N. Fujisawa, K. Ogita, N. Saito, Y. Nishizuka* 409

Evidence for a phosphorylation-induced conformational change in phospholamban cytoplasmic domain by CD analysis (FEBS 11554) *E. Terzi, L. Poteur, E. Trifilieff* 413

Molecular cloning and expression of the human melanocyte stimulating hormone receptor cDNA (FEBS 11553) *V. Chhajlani, J.E.S. Wikberg* 417

Site-directed mutagenesis of active-site-related residues in *Torpedo* acetylcholinesterase: Presence of a glutamic acid in the catalytic triad (FEBS 11551) *N. Duval, S. Bon, I. Silman, J. Sussman, J. Massoulié* 421

Author Index to Volume 309 424

Contents to Volume 309 429